



# ecology and environment, inc.

ROSSLYN CENTER, 1700 NORTH MOORE ST., ARLINGTON, VA 22209, TEL. 703-522-6065, TELEX 650-267-6032

International Specialists in the Environment

ORIGINAL  
(Red)

15

April 2, 1992

Document No: RC483

Ms. Donna Santiago  
U.S. Environmental Protection Agency  
Region III  
841 Chestnut Bldg. (3HW13)  
Philadelphia, PA 19107

*Bens Run Recycling - WV-511*

Subject: Site Visits to 3 PA/EPI Sites in West Virginia

Dear Ms. Santiago:

This letter is to inform you of our intentions to perform 3 site visits in West Virginia the week of April 20, 1992. The 3 sites in question are in Tyler, Mason and Ritchie counties. The Ecology and Environment, Inc. (E & E) personnel that will be present at each site are Keith Davison and Greg Hallford. The location in Tyler county, the Bens Run Recycling plant in Bens Run, West Virginia, was chosen for an Environmental Priorities Initiative (EPI) that is tentatively scheduled for Monday, April 20. The other 2 sites, Pyrochem, Inc. in Mason County, and Alfab, Inc. in Ritchie County are also chosen for EPIs scheduled for April 21st and 22nd respectively. You may recall that the Pyrochem site was scheduled to be visited at an earlier date (March 11) but access to the facility was denied and the site visit was postponed. We have yet to be given approval for access to the site, but to assure completion of the EPI report within the prescribed timetable, a perimeter survey and corresponding report will suffice. All facility representatives at the Alfab, Inc. and Bens Run Recycling plants have been contacted and notified of our plans to visit each of the sites on the dates indicated above. Enclosed are two letters which were sent to the indicated facility representatives documenting phone discussions. If there are any problems or questions concerning the proposed schedule please feel free to contact Nermin Ahmad, the Task Leader, or me at (703) 522-6065.

Sincerely,

*Gregory L. Hallford*

Gregory L. Hallford

GLH/nca

Enclosures

cc: M. Aucoin, E & E, Region III Site Manager

CTF: ZE5390

**RECEIVED**

APR 08 1992

**SITE ASSESSMENT  
SECTION**



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# ecology and environment, inc.

ROSSLYN CENTER, 1700 NORTH MOORE ST., ARLINGTON, VA 22209, TEL. 703-522-6065, TELEX 650-267-6032

International Specialists in the Environment

April 1, 1992

Document No: RC481

Clifford J. Meyer, Plant Manager  
Bens Run Recycling  
P.O. Box 60  
Bens Run, WV 26135  
(304) 652-1415

Subject: Request for Site Access  
Bens Run Recycling *WV-511*  
P.O. Box 60  
Bens Run, WV 26135

Dear Mr. Meyer:

This letter is in response to our discussion on April 1, 1992. Ecology and Environment, Inc. is under contract No. 68-W8-0085 to provide technical and management services to the United States Environmental Protection Agency (EPA). We have received a work assignment to perform an Environmental Priorities Initiative preliminary assessment as outlined below.

Please consider this a formal request for obtaining site access on Monday, April 20 to the Bens Run Recycling property in Bens Run, West Virginia. The purpose of this request is to conduct a preliminary assessment of the property in order to assess the need for further action by the EPA. Work to be performed on the property consists of walking the area, observing the on-going procedures, taking photographs, and obtaining information regarding waste-handling practices.

If you have any questions regarding the statutory basis for this inspection, please contact Mr. Gregory Ham at (215) 597-8229 in EPA's Region III in Philadelphia. If there are any other questions, please do not hesitate to contact Ross Alliston, the project team leader, Greg Hallford, or me at (703) 522-6065.

Respectfully,

*Gregory L. Hallford*

for Nermin K. Ahmad  
Task Leader, ARCS III

GLH/nca

cc: H. M. Dorsey, WVDNR, Asst. Chief Compliance Monitoring and Enforcement  
C. Cather, WVDNR, Compliance Monitoring and Enforcement  
D. Gable, WVDNR, Site Inspector  
M. Aucoin, E & E, Reg. III Site Manager

CTF: ZE5390

ICH A. MOORE, JR.  
Governor

STATE OF WEST VIRGINIA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT  
1260 Greenbrier Street  
Charleston, West Virginia 25311

RONALD R. POT  
Director

ROBERT K. PAR  
Deputy Director

April 29, 1988

WV-511

Consolidated Aluminum  
Mr. Tom E. Meeks  
P. O. Box 164  
Hannibal, Ohio 43931

Dear Mr. Meeks:

I am writing to you concerning your letter of March 25, 1988 in which you inquire into the possibilities of landfilling "black dross".

After a review of the lab analysis reports that you have submitted, our chemist has determined that "the leachate analytical results on 'Exhibit B' shows that the 'Bag House Dust and Black Dross' is not a hazardous waste". I conclude that these wastes may be landfilled.

If you do choose to landfill the wastes in West Virginia, the operator of the landfill must submit a permit modification request and this request must be approved by this office before landfilling of the bag house dust and black dross can begin. This should not involve a lot of time on our part.

If I can be of further assistance please feel free to contact me at (304) 348-5993.

Sincerely,

DIVISION OF WASTE MANAGEMENT



Kim Pritchard  
Assistant Chief  
Solid Waste Management Chief

KP:gs

Received 5/4/88

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## SECTION VIII PERSONAL PROTECTION INFORMATION

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VENTILATION: Local: In accordance with local, state, and federal regulations if TLV is exceeded.  
General: In accordance with local, state, and federal regulations if TLV is exceeded.  
Other: Not applicable

RESPIRATORY: When TLV is exceeded, use appropriate respiratory protection in accordance with NIOSH/MSHA.

PROTECTIVE GLOVES: As appropriate for task. Most resistant when molten or heated.

EYE PROTECTION: Safety glasses with side shields or face shield.

MEASURES TO BE TAKEN DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT THAT HAS BEEN IN CONTACT WITH THIS MATERIAL: N/A

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## SECTION IX SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:  
See Section VII above. For additional information, consult "Guidelines for Handling Molten Aluminum", Aluminum Association, 818 Connecticut Ave. NW, Washington, DC 20006.

OTHER PRECAUTIONS:  
Avoid contact with water; dross can react with water to yield ammonia, methane, acetylene and hydrogen

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N/A: Not Applicable

The information disclosed is believed to be reliable. Since the use of the product described herein is unknown, the discloser assumes no liability in regard to same. No warranty express or implied is made in association with the information provided herein or the use of the product in any form for any purpose. No license, actual or implied is granted in regard to the use, process or practices disclosed.



Attachments: A1, General Location Map  
A2, Process Flow Chart  
A3, Bills of Lading  
A4, DNR Trip Report  
A5, Hazardous Waste Notification Form  
A6, Discharge Monitoring Report, Outlet 001  
A7, Emissions Testing Report  
A8, Emission Evaluation Program  
A9, Deficiency Notice  
A10, Salt Cake Disposal Management Assessment  
A11, DNR's Letter Grant Permission to Landfill the Salt Cake  
A12, Aluminum Dross Situation

Photographs and Identification Sheet

## 1. Photo Identification

Photographer: James L. Bailey  
 Camera : Minolta Weathermatic Dual 35  
 Film : Kodacolor GB 135-12 200 Print  
 Witness : Richard W. Eaton  
 Date : April 30, 1991

<u>Photo No.</u>	<u>Time</u>	<u>Description</u>
1-1	9:45 a.m.	Aluminum dross that will be reprocessed in the reverberatory furnaces
1-2	10:00 a.m.	Used beverage containers (UBC)
1-3	10:05 a.m.	Aluminum recycling end product, aluminum ingot.
1-4	2:15 p.m.	Salt cake stored in the newly constructed salt cake and baghouse dust storage building
1-5	2:18 p.m.	Four additional photographs of salt cake piles stored in the newly constructed salt cake and baghouse dust storage building.
1-6	2:20 p.m.	
1-7	2:23 p.m.	
1-8	2:25 p.m.	

B. Bens Run Recycling must require their contract laboratory to include analysis dates and times in their results package. This information is necessary to verify the analysis was performed within the specified holding time (BOD, 48 hours; TSS, 7 days; Oil and Grease, 28 days).

C. The pH meter calibration must be verified by maintaining a log book. The calibration standards as well as the dates and times the calibration is performed must be recorded.

### 3. Air Inspection

A. Appropriate enforcement action should be taken by the WVAPCC concerning the permit violation. If no action is forthcoming, EPA Region III should take enforcement action.

B. New source tests should be performed at the delacquering operation to determine the types and levels of particulates being emitted at that operation.

C. A copy of this report should be forwarded to Ray Chalmers (3AT21) of the Air Enforcement Branch.

hydrogen cyanide  
ammonia  
methane  
acetylene

hydrogen  
carbon monoxide  
arsine  
phosphine

Reacting the samples with water would duplicate conditions the waste will be exposed to in a landfill. The test results would help to clarify the salt cake status as a hazardous or non-hazardous waste as defined in 40 C.F.R. 261.23(a)(4) and/or 261.23(a)(5).

40 C.F.R. 261.23(a)(4) reads as follows:

When mixed with water, it generates toxic gases, vapor or fumes in a quantity sufficient to present a danger to human health or the environment.

40 C.F.R. 261.23(a)(5) reads as follows:

It is a cyanide or sulfide bearing waste which when exposed to pH conditions between 2.0 and 12.5 can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

E. On May 2, 1991, the State of West Virginia approved Bens Run Recycling's request to again landfill the salt cake. However, this approval is contingent upon thirteen (13) specific conditions, which may prove difficult to achieve. A copy of the approval letter is included as Attachment No. 11.

F. Notwithstanding the West Virginia DNR's May 2, 1991 letter of approval, it appears the State agency has previously expressed concern with landfilling of the salt cake. These concerns are expressed in a document titled "Aluminum Dross Situation." This document is included as Attachment No. 12 to this report. Page 2 of this report states there are three NPL sites in EPA Region IV composed entirely of aluminum dross.

G. The WV inspectors were, during the week of May 27, 1991, given verbal instructions to stay away from this facility. They were instructed by their supervisor not to conduct any additional inspections at this facility, nor to accompany EPA during any inspections at this facility, even though seventeen (17) RCRA violations were documented during their 11/1/90 CEI.

## 2. NPDES Inspection

Bens Run Recycling must make the following corrections to comply with 40 C.F.R. 136:

A. The NPDES monitoring grab samples for BOD, TSS, and Oil and Grease must be cooled to 4.0°C after collection, and maintained at this temperature while in transit to the contract laboratory.

(d) The main objective in the disposal of salt cake is to handle it in a manner which will minimize the potential for gas generation and emission to the atmosphere. This can be achieved most effectively in a landfill designed to isolate the waste from the environment (pg. 13).

(e) The composition of the salt cake varies and, therefore, the amount of gas generated varies. NUS tests show more than a factor of 10 in off-gas quantities between "low-salt" and "medium salt" cake (pg. 16).

(f) The primary concern in the handling of salt cake is evolution of ammonia through contact with water (pg. 20).

(g) An analysis of ammonia generated by salt cake when mixed with water indicates that the concentration of ammonia to which a landfill worker would be exposed can be held down. With proper handling, concentrations of ammonia, the only gas capable of being emitted in concentrations potentially high enough to be of concern, can be maintained at levels that do not exceed the TLV or STEL (pg. 21).

(h) Eleven (11) special permit conditions are recommended for the handling of salt cake. One of the recommendations (No. 10, page 22) states, "Quarterly testing of the salt cake waste proposed for landfiling for hazardous characteristics should be conducted and submitted to DNR."

B. The DNR responded to a truck incident on October 15, 1990. Included in this response was sampling of the material involved in the incident. Analysis of the samples revealed total cyanide (reported as reactive cyanide) concentrations for two (2) samples at 24.2 mg/kg and 1,500 mg/kg. The facility's Salt Cake Disposal Management Assessment does not address cyanide.

C. The dust generated by the delacquering unit was sampled and tested by the WV DNR prior to removal of the Cyclone dust collector. Test results indicate the dust qualifies as a hazardous waste due to EP Toxicity lead (D008).

All emission, including the dust from the delacquering unit, are now vented through an incinerator to the atmosphere. Incineration is not an acceptable treatment technology for lead.

D. The salt cake's characteristics vary considerably, as noted on page 16 of the Salt Cake Management Assessment. Therefore, it is strongly recommended that EPA collect multiple samples of the salt cake and baghouse dust. The samples would be analyzed for reactive cyanide and sulfide.

In addition, samples of the salt cake and baghouse dust must also be reacted with water and the following off-gases quantified:

not allow the permittee to determine if analysis was conducted within the specified holding times.

The pH meter calibration could not be confirmed by reviewing the facility's records.

A Deficiency Notice was sent to the facility. The Deficiency Notice requests a response in the form of a written description of the corrective action taken by the permittee. Copies of the response will be sent to the DNR, the EPA Permits Enforcement Branch in Philadelphia and the inspector. A copy of the Deficiency Notice is included as Attachment No. 9.

### 3. Air Inspection Compliance

A. The facility was in compliance with all visible emission regulations on the day of the inspection.

B. The facility is in compliance with the West Virginia particulate regulations, however, if the cyclone is not replaced on the delacquering operation, the particulate test for that unit should be invalidated.

C. A permit violation may have occurred by the company's removal of the cyclone serving the delacquering without approval or notification of the WVAPEC or EPA - Region III.

D. No objectionable odors were detected off plant property.

## VII. Conclusions and Recommendations

### 1. RCRA Inspection

A. Bens Run Recycling contends the salt cake is not a listed hazardous waste, nor is it hazardous due to its characteristics. This argument is presented in the Salt Cake Disposal Management Assessment. A copy of this document is included as Attachment No. 10.

This document presents an explanation of the accident plus an evaluation of the two landfills involved. In addition, this document makes very specific recommendations for handling, testing, and landfilling the salt cake.

These comments and recommendations include:

(a) The construction of a building to keep the material dry (pg. 4).

(b) During transport by truck, the salt cake must be double tarped to keep the material dry (pgs. 4 and 5).

(c) The trucking company transporting the salt cake has been supplied with MSDS sheets, which warn against the addition of water to the salt cake (pg. 6).

that West Virginia has no regulation of volatile organic compounds for the area of West Virginia in which the plant is located.

During the course of the inspection, the inspectors were informed that the cyclone used to collect particulate from the delacquering operation was taken out of service in December, 1990. The company felt such a minor amount of particulate was being generated, that it was unnecessary to continue using the cyclone. However, source test for particulate conducted on the delacquering was performed with the cyclone still "on line." This raises the question of the present validity of the particulate test results for the delacquering since the cyclone has been removed. Also, this control equipment removal was done without the notification or approval of the West Virginia Air Pollution Control Commission (WVAPCC). The inspectors verified this fact with the WVAPCC Office in Charleston, WV., after returning to the Wheeling Office. This is a violation of the permit issued by the State of West Virginia.

## VI. Compliance Summary

### 1. RCRA Inspection Compliance

A. The facility's Hazardous Waste Notification must be updated to include the spent methylene chloride (F001/F002) discussed in their Best Management Practices Plan.

B. Prior to removal of the delacquering cyclone dust collector, the DMR sampled the dust. The test results indicated an EP Toxicity lead (D008) of 10.4 mg/l. This material, although generated in relatively small quantities, was not manifested out as a hazardous waste. Also, EP Toxic waste was subject to the Land Disposal Restrictions as of August 8, 1990.

C. The WV DNR noted seventeen (17) violations in their December 12, 1990, RCRA CEI. Violation No. 1., involving notification of hazardous waste activities, has been corrected. The remaining sixteen (16) violations include:

- (a) Incomplete hazardous waste determination of the salt cake,
- (b) Improper disposal of hazardous waste,
- (c) Offering hazardous waste for transport without a hazardous waste manifest.

The remaining 13 violations noted by the DNR include the failure to comply with other requirements specified in 40 C.F.R. 262 (Standards Applicable to Generators of Hazardous Waste). These violations have not been corrected by the facility.

### 2. NPDES Inspection Compliance

A. The monitoring samples collected at Outfall 001 are not refrigerated prior to shipment nor while in transport to the contract laboratory. This is a violation of 40 C.F.R. 136.

B. The analytical results package from the contract laboratory does not include analysis dates and times. Failure to provide this information does

DMR preparation is simplified by the once per month sampling requirement and appears correct. A copy of the April, 1991 DMR is included as Attachment No. 6.

## V. Air Status

1. Visible Emissions - Prior to entering Bens Run Recycling, the inspectors observed the plant from an adjacent property to detect any visible emissions coming from the facility. No visible emissions were being emitted from the building which houses the two (2) reverberatory furnaces and the incinerator for the delacquarer. No emissions were noted coming from the rotary dross furnace building or the two (2) baghouses which serve the rotary dross furnaces. Also, no visible emissions were seen coming from the new building which is used to hold the used salt cake and baghouse dust. As mentioned in the facility description section of this report, the storage building is maintained under a negative pressure to control fugitive emissions. This storage building has exhaust fans which are ducted to one of the baghouses serving the rotary dross furnaces.

2. Odors - No objectionable odors were detected off plant property prior to entering the plant. During the plant inspection, a "garbage type odor" was detected in the storage yard for the used beverage can (UBC) material. An ammonia type odor was noted while walking near the back of the rotary dross furnace building, where some of the salt cake is allowed to cool.

No determination could be made concerning odors at the delacquarer since that operation was down during the inspection.

3. Source Testing - An emission testing program was conducted at four (4) sample locations at Bens Run Recycling from July 17-26, 1990 by Hemeon Associate, Inc. of Pittsburgh, Pa., (Attachment No. 7). The following parameters were sampled:

<u>Source</u>	<u>Parameter</u>
Reverberatory Fce No's. 1 & 2	(1) Particulates (2) Nitrous Oxide
No. 2 Rotary Fce Baghouse	(1) Particulates
Delacquarer	(1) Particulates (2) Nitrous Oxide (3) Total Gaseous Non-methane Organics (TGNMO) (4) Visible Emissions

Another testing session was conducted on November 8 and 9, 1990 by Hemeon Associates, Inc., involving a new baghouse which was constructed to serve the No. 1 rotary dross furnace. The purpose of this test was to measure particulate matter (Attachment No. 8).

All of the test results complied with the allowable emissions regulated by the West Virginia Air Pollution Control Commission. It should be noted

### III. RCRA Status

Bens Run Recycling filed a Notification of Hazardous Waste Activity as a small quantity generator (100 to 1,000 kg/month). The notification was signed by David Beale, Administrative Manager on November 1, 1990. The date, March 7, 1990, is also stamped in the Comments section.

Ignitable waste (D001) is the only hazardous waste listed on the Hazardous Waste Notification form. A copy of the Hazardous Waste Notification form is included as Attachment No. 5.

The facility's Best Management Practices (BMPs) plan discusses the use and proper disposal of solvents that contain methylene chloride. Spent methylene chloride, when used for its solvent properties, or a spent solvent mixture containing ten per cent or more by volume of methylene chloride is a listed hazardous waste, F001/F002.

### IV. NPDES Status

Bens Run Recycling  
NPDES I.D. No. WV0078344  
Issuance Date: January 27, 1991  
Expiration Date: December 27, 1995

Bens Run Recycling was issued an NPDES Permit to monitor all rain water run-off from the facility including: raw materials storage areas, production areas, and parking lot.

The parameters of concern are flow, Total Suspended Solids, Oil and Grease, and pH. The pH limits are 6.0 to 9.0 Standard Units. The other parameters are specified as monitor only, meaning no average monthly or daily maximum limits have been set. The measurement frequency for all parameters is once per month. Sample type is specified as grab for BOD, TSS and pH. Flow measurement is via an estimate only.

A contract laboratory, NUS Corporation of Pittsburgh, Pennsylvania, provides sample containers and does the analysis. The Oil and Grease sample container is pre-preserved by NUS.

The required grab samples for TSS and Oil and Grease are collected by a Bens Run Recycling employee. These samples are shipped to Pittsburgh, Pa. by an overnight delivery service. The sampling location is the effluent from a catch basin adjacent to State Route 2. The samples are not refrigerated prior to, nor while in transit, to the laboratory.

The analytical result package supplied by NUS does not include analysis, dates, and times. It is, therefore, impossible to determine if the specified holding time for either parameter is maintained.

The pH measurements are performed on site by a Bens Run Recycling employee. A pH meter calibration log book is not maintained. For this reason, calibration of the meter could not be confirmed.

The delacquered UBC is remelted in two reverbatory furnaces. The process additives previously described are used to separate the recoverable aluminum from the dross. The dross generated by the reverbatory furnace and the dross shipped to Bens Run from two other consolidated aluminum plants is used as feed stock for the two rotary furnaces. The same process additives are used in the rotary.

The furnaces produce a waste product called salt cake or black dross.

A cyclone and baghouse are used to collect dust generated by the rotary furnaces.

The recovered aluminum is either cast into ingots and sold on the open market or transported in liquid form to Consolidated Aluminum in Hannibal, Ohio.

The quantity of salt cake generated averages 60,000 pounds per day. The quantity of baghouse dust generated averages 30,000 pounds per week.

Prior to April 12, 1991, the salt cake was cooled in an open area behind the furnace building. On April 12, 1991, a new building constructed specifically to house the salt cake and baghouse dust went into service. All access doors remain closed, except when moving the salt cake or baghouse dust in or out of the building. Exhaust fans ducted to the baghouse maintain a negative pressure within this building to control fugitive emissions.

The salt cake and baghouse dust are currently shipped to American Recovery in Cleveland, Ohio, for the recovery of metals.

The initial step of the recovery process used by American Recovery is to react the material with water.

From April, 1989 to October, 1990, the salt cake and baghouse dust were transported by truck to the Monongalia County Landfill near Morgantown, West Virginia. Normally, the waste was shipped out at a rate of two truck loads per day. See Attachment No. 3, copies of Bills of Lading, Monongalia County Landfill. One of these trucks was involved in the accident discussed earlier in this report. It was this incident coupled with facility based citizen complaints which eventually led to the EPA inspection of the facility.

West Virginia DNR personnel were called to the vehicle accident site after a volunteer fire department hosed the dump box of the truck. The water and the salt cake reacted causing the release of ammonia and other gases. A copy of the DNR Trip Report, including analytical results covering this incident, is included as Attachment No. 4. (Note: Lab. No. S-52998-90, reactive cyanide 1500 mg/kg.) Also included in the DNR report is a copy of the Material Safety Data Sheet for aluminum skimmings or dross. The MSDS form stresses the necessity of avoiding contact with water. An example is Section IX, entitled Special Precautions. This Section states, "Avoid contact with water; dross can react with water to produce ammonia, methane, acetylene and hydrogen."

A multi-media inspection was conducted at Bens Run Recycling for the following reasons:

- Numerous citizen's complaints to the Wheeling EPA Office concerning air/fugitive emissions at the Bens Run facility.
- A West Virginia newspaper contacted the Wheeling EPA Office requesting information on a truck incident that occurred near Morgantown, West Virginia. The truck was transporting a waste material from Bens Run Recycling.

While enroute, the truck experienced mechanical problems. While the driver was absent seeking assistance, a passing motorist noted smoke emanating from the truck and called the fire department. When the fire department hosed down the truck, the waste material on board reacted with the water. See Attachment No. 10 for a more detailed explanation of this event as presented by a consultant retained by Bens Run Recycling.

The multi-media inspection involved a RCRA compliance evaluation, a review of solid waste handling and disposal practices, an NPDES inspection, and an Air Compliance inspection.

## II. Facility Description and Background Information

Bens Run Recycling is located on State Route 2 at Bens Run, Tyler County, West Virginia. A general location map is included as Attachment No. 1.

The facility's primary function is recycling URC (used beverage containers). Other aluminum is also recycled including: lithographic sheets, aluminum dross from two consolidated aluminum plants (Hannibal, Ohio and Jackson, Tennessee), and other scrap aluminum. A process flow chart is included as Attachment No. 2.

Process additives used in the reclamation process include: sodium chloride, potassium chloride, and potash (potassium carbonate).

The reclamation process for the UBC is more extensive than for the other scrap aluminum. The UBC is shredded and delacquered. The lacquer is burned off in a furnace or delacquering unit. The delacquering unit was initially equipped with a cyclone dust collector. The dust collector was removed in December, 1990. Reportedly, the cyclone was removed due to the minimal volume of dust collected (5 gallons/month). The delacquering unit exhaust is now vented through the incinerator to the atmosphere.

Prior to the cyclone's removal, the DNR sampled the dust collected and an EP Toxicity test was conducted. The EP Toxicity for lead (D008) was 10.4 mg/l. The maximum allowable concentration for D008 is 5.0 mg/l.

The dust collected by the delacquering unit's cyclone was disposed of by mixing it with the baghouse dust and/or salt cake and landfilled.

I. Introduction

Company: Bens Run Recycling\*  
P. O. Box 60  
Bens Run, WV 26135

\*Wholly owned by Consolidated Aluminum Corp.

RCRA Identification Number: WVD988774626

Status: Small Quantity Generator

NPDES Number: WV0078344

AIRS Number: 545095-00006

Company Personnel: Clifford Meyer, Plant Manager  
David Beale, Administrative Manager

State Personnel: Dale Gable, Environmental Inspector  
Kevin Campbell, Environmental Inspector  
Michael Mills, Environmental Inspector

EPA Inspectors: James L. Bailey, Team Leader  
RCRA Inspection Report  
NPDES Inspection Report

Richard W. Eaton  
Air Inspection Report

Inspection Date: April 30, 1991  
Start Time : 9:00 a.m.  
End Time : 3:15 p.m.

Multi-Media Inspection Report

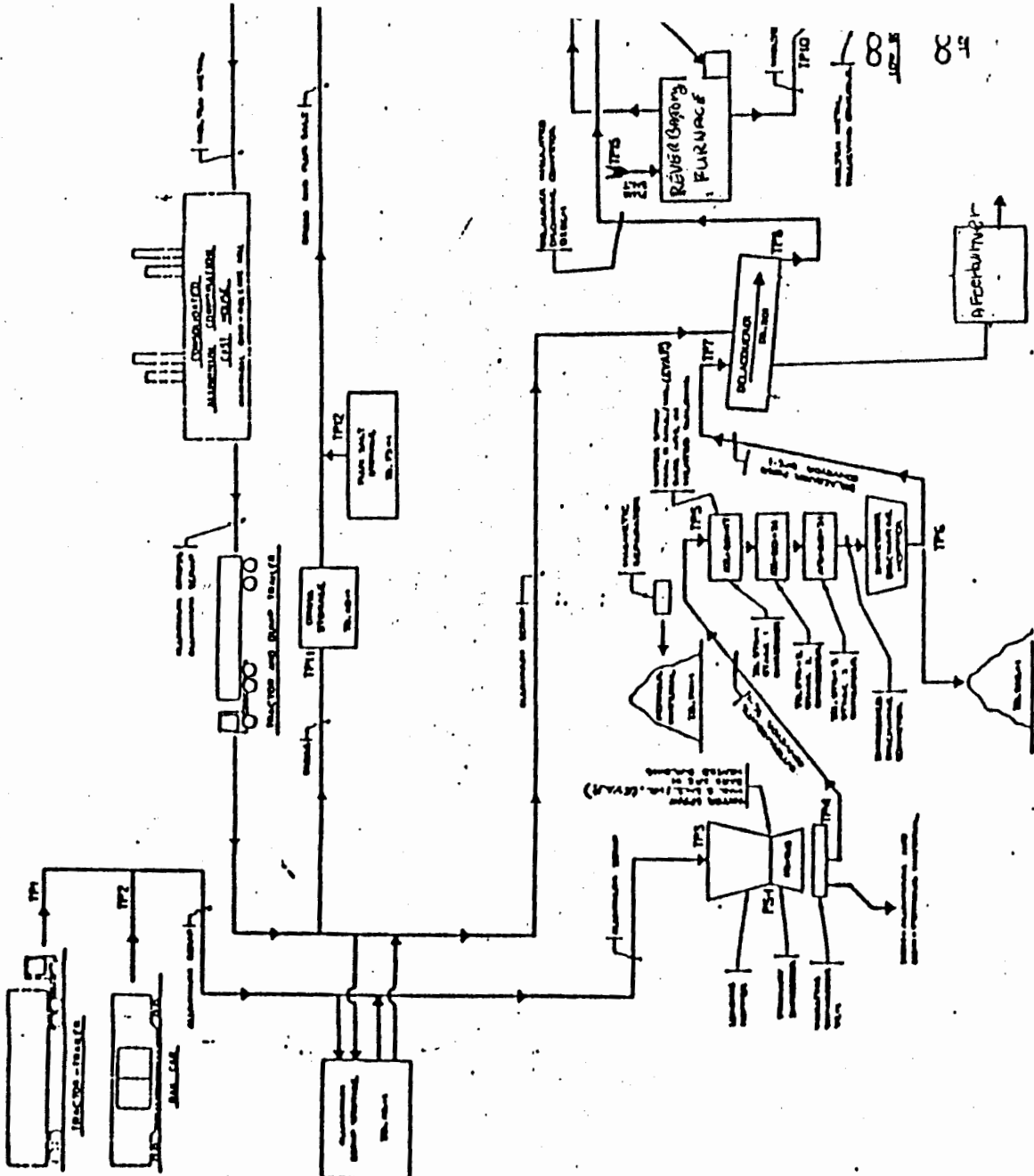
Bens Run Recycling

Bens Run, West, Virginia

April 30, 1991

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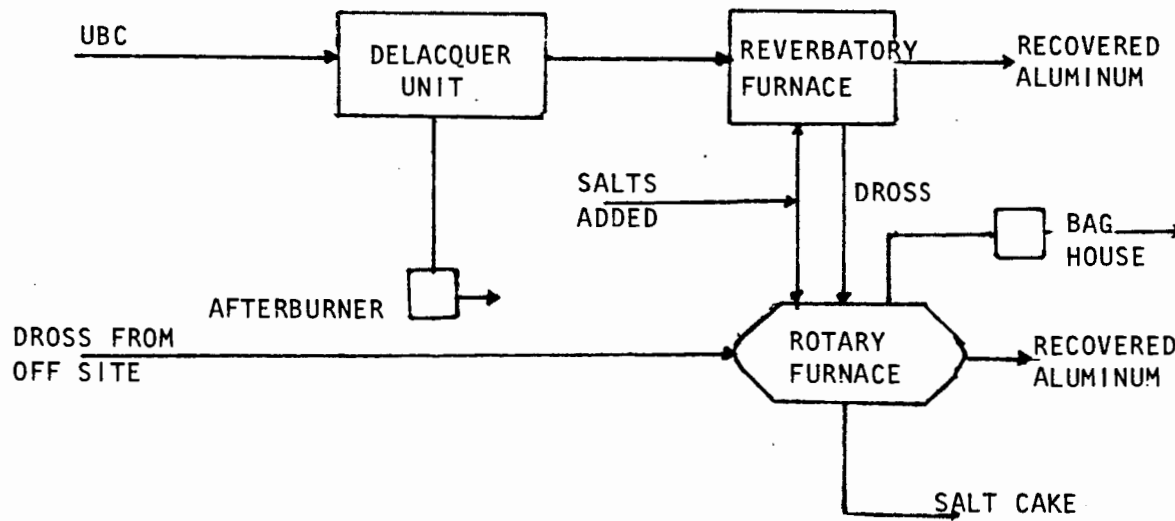
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Attachment No. 1

BENS RUN RECYCLING FACILITY  
BENS RUN, WV.

SALT CAKE GENERATION



Understand that the carrier, its agents, servants, and employees, and the shipper, its agents, servants, and employees, agree to the terms and conditions of the Uniform Domestic Freight Bill of Lading set forth in Official, Southern, Western and Illinois Freight Classification in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

From **CONSOLIDATED ALUMINUM™** At **BENS RUN, WV**

Date Shipped 9-27 19 90 Customer Order No. \_\_\_\_\_

(Mail or street address of consignee — For purposes of notification only)

Consigned to **Monongahela County Landfill**

Destination **Morgantown** State of **West Virginia**

On Collect on Delivery Shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1

Route **CPU**

Delivering Carrier **Lambert Enterprises** Vehicle or Car Initial \_\_\_\_\_ No. \_\_\_\_\_

Collect On Delivery \$ \_\_\_\_\_ and remit to: \_\_\_\_\_

C.O.D. charge to be paid by } Shipper ☐  
 } Consignee ☐

NO.	KIND OF PACKAGE	HM	DESCRIPTION OF ARTICLES, SPECIAL MARKS AND EXCEPTIONS	WEIGHT (SUBJECT TO CORR.)	CLASS OR RATE	Subject to Section 7 of conditions of applicable bill of lading, this shipment is to be delivered to the consignee without recourse to the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
1	T/L		Dross Salt			<b>CONSOLIDATED ALUMINUM CORPORATION</b> By _____ (Signature of Consignor) If charges are to be prepaid, write or stamp here, "To be Prepaid." "Prepaid" Received \$ _____ to apply in prepayment of the charges on the property described herein. Agent or Cashier Per _____ (The signature here acknowledges only the amount prepaid.) Charges Advanced: _____
			Gross Weight	59480		
			Tare Weight	25560		
			Net Weight	33920		
						{The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of Rule 41, of the Consolidated Freight Classification. {This is to certify that the above materials are properly described by name and are packed and marked and are in proper condition for transportation according to regulations by the Interstate Commerce Commission. "If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." {Shipper's Inmate in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission.
			Total Gross Weight			
			Skid or Dunnage Allowance			

Note—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.  
 The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_ per \_\_\_\_\_

**CONSOLIDATED ALUMINUM CORPORATION**  
 Shipper, Per Bill Suter Agent, Per Chuck P.

Permanent post office address of shipper,

P. O. BOX 60, BENS RUN, WV 26135

C-217/BR

Attachment No.

At BENS RUN, WV

Customer Order No. \_\_\_\_\_  
(Mail or street address of consignee — For purposes of notification only)

destination Morgantown State of West Virginia

Route \_\_\_\_\_ CPU \_\_\_\_\_

Delivering Carrier Lambert Enterprises Vehicle or Car Initial \_\_\_\_\_ No \_\_\_\_\_

Collect On Delivery \$ \_\_\_\_\_ and remit to:

C.O.D. charge to be paid by	}	Shipper	<input type="checkbox"/>
		Consignee	<input type="checkbox"/>

Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

<p>Subject to Section 7 of conditions of applicable bill of lading, this shipment is to be delivered to the consignee without recourse to the consignor, the consignor shall sign the following statement:</p> <p>The carrier shall take delivery of this shipment upon payment of freight and other lawful charges.</p>	
<p align="center"><b>CONSOLIDATED ALUMINUM CORPORATION</b></p>	
<p>By _____ (Signature of Consignor)</p>	
<p>If charges are to be prepaid, write or stamp here, "To be Prepaid."</p> <p align="center"><b>"Prepaid"</b></p>	
<p>Received \$ _____ to apply in prepayment of the charges on the property described herein.</p>	
<p align="center">Agent or Cashier</p>	
<p>Per _____ (The signature here acknowledges only the amount prepaid.)</p>	
<p>Charges Adv. _____</p>	
<p>{The fibre boxes used for this shipment conform to the specification set forth in the box maker's certificate thereon, and all other requirements of Rule 41, of Consolidated Freight Classification</p>	
<p>{This is to certify that the above materials are properly described by name and are packed as marked and are in proper condition for transportation according to regulations by the Interstate Commerce Commission.</p> <p>"If the shipment moved between two ports by a carrier by way of the low route that the bill of lading shall state whether "</p> <p>"carrier's or shipper's weight"</p> <p>{Shipper's Imprints in Red stamp not a part of Bill of Lading approved by the Interstate Commerce Commission.</p>	

Note—Where the rate is dependent on value, shippers are required to state specifically writing the agreed or declared value of the property.  
The agreed or declared value of the property is hereby specifically stated by the shipper to not exceeding \_\_\_\_\_ per \_\_\_\_\_.

**CONSOLIDATED ALUMINUM CORPORATION**  
Shipper, Per \_\_\_\_\_

Agent, Per

Permanent post office address of shipper,  
P. O. BOX 60, BENS RUN, WV 26135  
C-217/BB

## PLANT ACCOUNTING - 1

Emergency Response

RE: Lambert Enterprise

DATE RESPONDED: October 15, 1990

INSPECTORS: John Hando, West Virginia Division of Natural Resources,  
Waste Management Section

Stan Noskal, West Virginia Division of Natural Resources,  
Waste Management Section

Minter Foster, West Virginia Division of Natural Resources,  
Water Resources Section

DATE PREPARED: October 18, 1990

PREPARED BY: John Hando

On October 15, 1990 the above referenced inspectors responded to an incident involving Lambert Enterprise. Initially Clinton District Volunteer Fire Department responded to a fire in the dump box of a truck. Upon their arrival they were informed that the truck contained wooden pallets and they began hosing the truck down.

This resulted in a reaction which released ammonia gas. The DNR was then contacted for both this and concerns about the runoff. Approximately 2,500 gallons of water was used, which resulted in a pH problem. The pH of this runoff ranged from 10-12.

The material on this truck was identified as Aluminum Dross. The generator of this waste was Bens Run Recycling, a Division of Consolidated Aluminum, P. O. Box 60, Bens Run, West Virginia 26135 (304) 652-1415.

The company contact was a Mr. Clifford Meyer, Plant Manager. Mr. Meyer contacted Weavertown Environmental Group to handle the clean up of the material and runoff.

In charge of this operation was Mr. David Glaser. According to Material Safety Data Sheets supplied by Mr. Meyer, this material may react with water to produce ammonia, methane, acetylene, and hydrogen gas.

The runoff was placed in a vacuum truck by Weavertown. The truck with reacted Aluminum Dross was chained shut and taken to the Monongalia County Landfill, which was the original destination of the waste, before the incident. Final disposal is pending laboratory results.

Photos 1 & 2 show the runoff from the truck. Photos 3-6 show the truck with the material reacting.

At BENS RUN, WV

Customer Order No. \_\_\_\_\_  
(Mail or street address of consignee — For purposes of notification only.)

Destination Morgantown State of West Virginia

On Collect on Delivery Shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1

Route \_\_\_\_\_ CPU \_\_\_\_\_

Delivering Carrier Lambert Enterprises Vehicle or Car Initial \_\_\_\_\_ No. \_\_\_\_\_

Collect On Delivery \$ \_\_\_\_\_ and remit to:

C.O.D. charge to be paid by	}	Shipper	<input type="checkbox"/>
		Consignee	<input type="checkbox"/>

Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

NO.	KIND OF PACKAGE	HM	DESCRIPTION OF ARTICLES, SPECIAL MARKS AND EXCEPTIONS	WEIGHT (SUBJECT TO CORR.)	CLASS OR RATE
1			Dross Salt		
			Gross Weight	61060	
			Tare Weight	25620	
			Net Weight	35440	
			Total Gross Weight		
			Skid or Dunnage Allowance		

Note—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.  
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_ per \_\_\_\_\_

**CONSOLIDATED ALUMINUM CORPORATION**

Shipper, Per

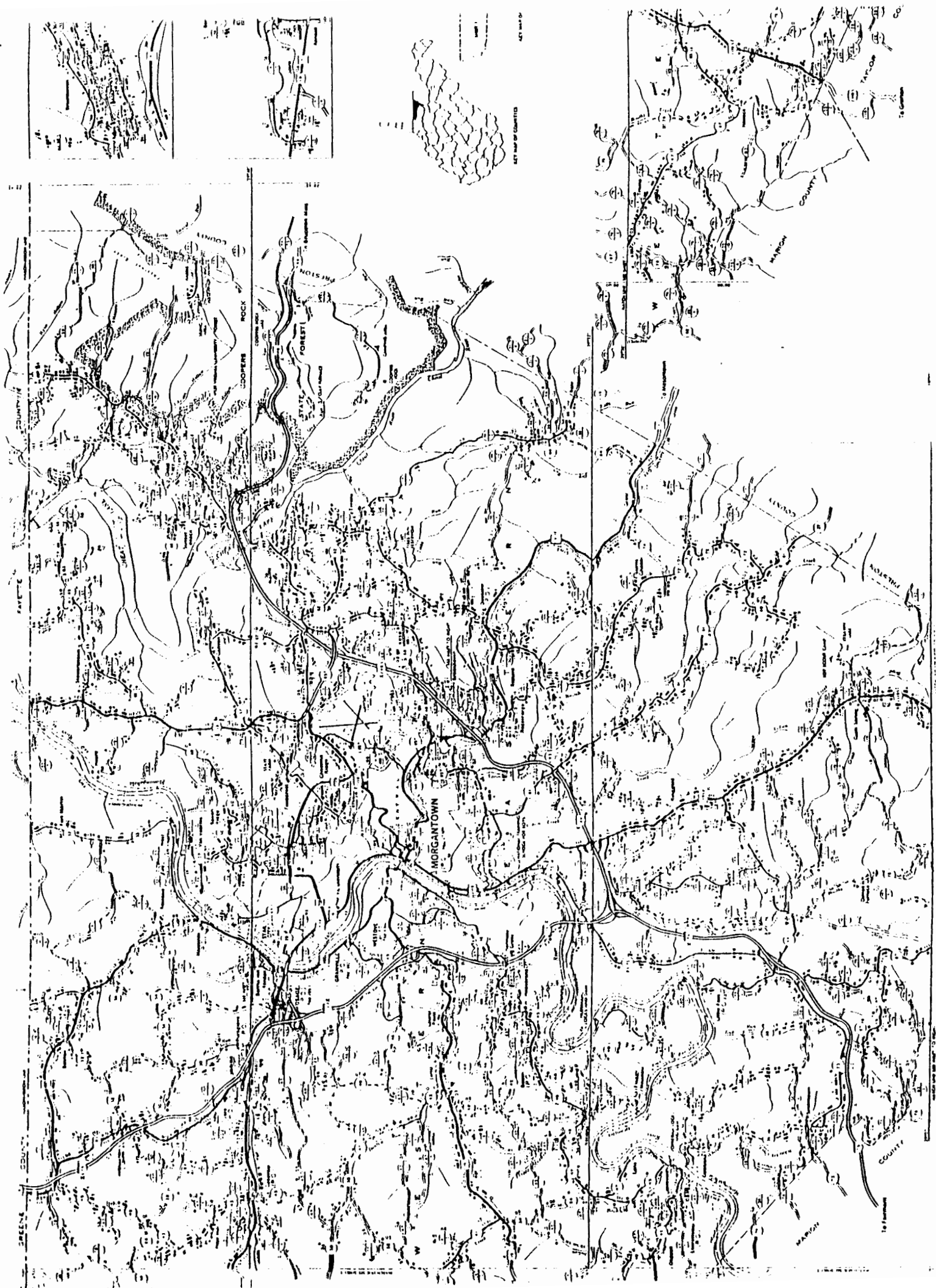
Agent, Per

1 permanent post office address of shipper,

P. O. BOX 60, BENS RUN, WV 26135

**G-217/BR**

## PLANT ACCOUNTING - 1



Emergency Response

RE: Lambert Enterprise

DATE RESPONDED: October 16, 1990

INSPECTORS: John Hando, West Virginia Division of Natural Resources,  
Waste Management Section

Brad Swiger, West Virginia Division of Natural Resources,  
Solid Waste Management Section

Minter Foster, West Virginia Division of Natural Resources,  
Water Resources Section

DATE PREPARED: October 22, 1990

PREPARED BY: John Hando

On October 16, 1990 the above referenced inspectors sampled the material involved in the Emergency Response Incident involving Beus Run Recycling. A total of fourteen (14) samples were taken. Seven (7) from the truck bed itself, (Photo 9) and seven (7) from material that was dumped early that morning, October 16, 1990, (Photo 7 & 8). These samples were split with Mr. Paul Kopp with the Department of Highways.

These samples are being analyzed for reactivity to determine if this waste is a hazardous waste, (see the enclosed MSDS).

Attachments: MSDS  
Photos 7-9

[illegible]

White - Shipment      Canary - Laboratory      Pink - Sampler's Copy

# PHOTO LOG

Company name \_\_\_\_\_ Location \_\_\_\_\_  
Facility name \_\_\_\_\_ Stream \_\_\_\_\_

[illegible]

Photographer's signature

John C. Hando

1. Photo number
- \*2. Film description (type, ASA, expiration date)
- \*3. Focal length of lens used
- \*4. F-Stop, Shutter speed
5. Lighting conditions

6. Weather
7. Date/Time
8. Location
9. Brief description of photo

\*Not necessary for instant development film

FILM TURNED OVER TO Mr. Photo

FOR DEVELOPING ON October 17, 1990

PHOTOGRAPHS WERE RECEIVED ON October 18, 1990

FROM DEVELOPER

842-5285

Nov 9, 1990


Attention: John Hando  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT  
1304 Goose Run Road  
Fairmont, WV 26554

Sample I.D.: Truck Bed  
5001  
Lab. Number: S-52999-90

PARAMETER/METHOD	VALUE	UNITS	ANALYST
Flashpoint	>200	Deg/F	BP
Ammonia Nitrogen EPA 350.2*	7000	mg/kg	NA
Reactive Cyanide	24.2	mg/kg	BS
Reactive Sulfide	<1.0	mg/kg	BS

Date Sampled: Oct 16, 1990 11:14  
Sampled By: John Hando  
Date Sample Received: Oct 16, 1990 15:14  
Date Sample Analyzed: Oct 17, 1990  
Lab Time: 10:00  
Field Time: 11:14 Oct 16, 1990

Approval

  
William F. Kirk, Jr.

Sample I.D.: Truck Bed/5001  
Reliance Laboratories, Inc., No.: S-52999-90, does not exhibit the characteristics of Ignitability as defined in Test Methods For Evaluating Solid Waste, SW-846, Section 2.1.1, Ignitability the Regulatory Definition.  
Sample I.D.: Truck Bed/5001  
Reliance Laboratories, Inc., No: S-52999-90, exhibits the characteristics of Reactivity as defined in Test Methods For Evaluating Solid Wastes, SW-846, Section 2.1.3, Reactivity, the Regulatory Definition.

ALL  
CERTIFICATES MUST BE SIGNED BY THE ANALYST  
AND RETAINED BY THE ANALYST  
P.O. BOX 625  
BENEDUM INDUSTRIAL PARK  
BRIDGEPORT, WV 26330  
ORIGINAL CERTIFICATE IN FILE IS MANDATORY  
FOR THIS CERTIFICATE TO BE VALID

STATE OF MISSISSIPPI  
DEPARTMENT OF NATURAL RESOURCES

**RECEIPT FOR SAMPLES**

Project Number 00000001		Project Name or Code SAND BEACH					Name of Facility Mobile Bay Marine Landfill			
Samplers (Signature) [Signature]							Facility Location Mobile Bay Marine Landfill			
Split Samples Offered 1/12							Accepted _____ Declined _____			
Station Number	Date	Time	Comp.	Grab	Split Samples	Tag Numbers	Station Description	No. of Containers	Remarks	
SB01	12-1-90	111	✓		1/1	SB01	Landfill	3		
SB02	12-1-90	105	✓		1/1	SB02	Landfill	4		
SB03	12-1-90	107	✓		1/1	SB03	Truck Bed	1		
SB04	12-1-90	112	✓		1/1	SB04	Truck Bed	5		
Transferred by (Signature) [Signature]							Received by (Signature) [Signature]			Telephone 
Date 12-1-90		Time 1:14					Title 		Date 	Time 

6. It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.
7. It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.
8. It is a forbidden explosive, as defined in 49 CFR 173.51, or a Class A explosive, as defined in 49 CFR 173.53, or a Class B explosive, as defined in 49 CFR 173.88.
9. A solid waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D003.

#### 7.3.3 Interim Guidance For Reactive Cyanide

##### 7.3.3.1 The current EPA action level is:

Total releasable cyanide: 250 mg HCN/kg waste.

---

##### 7.3.3.2 Test Method to Determine Hydrogen Cyanide Released from Wastes

## 1.0 SCOPE AND APPLICATION

1.1 This method is applicable to all wastes, with the condition that wastes that are combined with acids do not form explosive mixtures.

1.2 This method provides a way to determine the specific rate of release of hydrocyanic acid upon contact with an aqueous acid.

1.3 This test measures only the hydrocyanic acid evolved at the test conditions. It is not intended to measure forms of cyanide other than those that are evolvable under the test conditions.

## 2.0 SUMMARY OF METHOD

2.1 An aliquot of the waste is acidified to pH 2 in a closed system. The gas generated is swept into a scrubber. The analyte is quantified. The procedure for quantifying the cyanide is Method 9010, Chapter Five, starting with Step 7.3.5 of that method.

Oct 30, 1990

Attention: John Hando  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT  
1304 Goose Run Road  
Fairmont, WV 26554


Sample I.D.: Landfill  
5001

Lab. Number: S-52998-90

PARAMETER/METHOD	VALUE	UNITS	ANALYST
Flashpoint	110	Deg/F	BP
Ammonia Nitrogen	15400	mg/kg	NA
EPA 350.2*			
Reactive Cyanide (total cyanide)	1500	mg/kg	BS
Reactive Sulfide	400	mg/kg	BS

Date Sampled: Oct 16, 1990 11:14  
Sampled By: John Hando  
Date Sample Received: Oct 16, 1990 15:14  
Date Sample Analyzed: Oct 17, 1990  
Lab Time: 10:00  
Field Time: 11:14 Oct 16, 1990

Approval

  
William F. Kirk, Jr.

Sample I.D.: Landfill/5001

Reliance Laboratories, Inc., No.: S-52998-90, exhibits the characteristics of Ignitability as defined in Test Methods For Evaluating Solid Waste, SW-846, Section 2.1.1, Ignitability, the Regulatory Definition.

Sample I.D.: Landfill/5001

Reliance Laboratories, Inc., No. S-52998-90, exhibits the characteristics of Reactivity as defined in Test Methods For Evaluating Solid Waste, SW-846, Section 2.1.3, Reactivity, the Regulatory Definition.

IT IS CERTIFIED THAT ALL  
ANALYTICAL DATA REPRESENTED HEREIN HAVE BEEN  
PREPARED BY RELIANCE LABORATORIES, INC.  
P. O. BOX 625  
BRIDGEPORT, WV 26330

ORIGINAL SIGNATURES MUST BE FURNISHED BY  
FOR THIS CERTIFICATION TO BE VALID

## PLANT ACCOUNTING - 1

## 8.0 CALCULATIONS

8.1 Determine the specific rate of release of HCN, using the following parameters:

A = Concentration of HCN in scrubber (mg/L)  
(This is obtained from Method 9010.)

L = Volume of solution in scrubber (L)

W = Weight of waste used (kg)

S = Time of measurement = Time N<sub>2</sub> stopped - Time  
N<sub>2</sub> started (sec)

$$R = \text{specific rate of release} = \frac{A \cdot L}{W \cdot S}$$

Total available HCN (mg/kg) = R x 1,800.

---

### 7.3.4 Interim Guidance For Reactive Sulfide

7.3.4.1 The current EPA action level is:

Total releasable sulfide: 500 mg H<sub>2</sub>S/kg waste.

---

#### 7.3.4.2 Test Method to Determine Hydrogen Sulfide Released from Wastes

## 1.0 SCOPE AND APPLICATION

1.1 This method is applicable to all wastes, with the condition that waste that are combined with acids do not form explosive mixtures.

1.2 This method provides a way to determine the specific rate of release of hydrogen sulfide upon contact with an aqueous acid.

1.3 This procedure releases only the evolved hydrogen sulfide at the test conditions. It is not intended to measure forms of sulfide other than those that are evolvable under the test conditions.

## 2.0 SUMMARY OF METHOD

2.1 An aliquot of the waste is acidified to pH 2 in a closed system. The gas generated is swept into a scrubber. The analyte is quantified. The procedure for quantifying the sulfide is given in Method 9030, Chapter Five.

SEVEN - 9

Revision 0  
Date September 1986

# SECTION VI CORROSIVITY AND REACTIVITY DATA

STABILITY	UNSTABLE <input type="checkbox"/>	STABLE <input checked="" type="checkbox"/>	POLYMERIZATION MAY OCCUR <input type="checkbox"/>	WILL NOT OCCUR <input checked="" type="checkbox"/>
<p>INCOMPATIBILITY (MATERIALS TO AVOID): Non-metallic component reactive with H<sub>2</sub>O-producing ammonia, methane, acetylene and hydrogen. Metallic component reactive with acids (HCl and H<sub>2</sub>SO<sub>4</sub> and alkaline materials (KOH or results in hydrogen evolution. Also reactive with halogens, oxidizing agents &amp; certain halogenated hydrocarbons. Produces hydrogen in reaction with acids and caustics. Depending on alloy, can liberate small quantities of various metallic oxides.</p> <p>HAZ. DEF. CAMP None expected.</p>				
<p>CONDITIONS TO BE AVOIDED:</p> <p>Do not expose finely divided dust to ignition sources. Do not allow hot dross to come into contact with water or wet materials. Use approved dust collection methods and avoid creation of dust clouds and/or accumulation of or powders during processing.</p>				

# SECTION VII STORAGE, HANDLING AND USE PROCEDURES

<p>NORMAL STORAGE AND HANDLING:</p> <p>Do not store outdoors when wet conditions exist. As a dust or powder, keep from all sources of ignition and moisture. Do not ship or transport when wet or hot.</p>	
<p>NORMAL USE:</p> <p>See above. Wear approved personal protective equipment when handling in molten or hot state (flame retardant clothing, face and eye protection, gloves).</p>	
<p>STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS: Wear gloves, safety glasses and protective clothing as appropriate. Molten material should be damped with DRY sand or salt flux until solidified. Do not use water. Clean up sp of powder/dust with non-sparking scoops and brushes.</p>	
<p>WASTE DISPOSAL METHOD: In accordance with local, State and Federal regulations. Dross can be sold to re to recover usable metal and other material.</p>	

# SECTION VIII PERSONAL PROTECTION INFORMATION

<p>RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSH-MSHA approved dust and fume respirators.</p>	
VENTILATION	<p>LOCAL: In accordance with local, State and Federal regulations if TLV is exceeded.</p>
	<p>GENERAL: In accordance with local, State and Federal regulations if TLV is exceeded.</p>
	<p>OTHER:</p>
<p>PROTECTIVE GLOVES: As appropriate for task. Heat resistant when molten or heated.</p>	
<p>EYE PROTECTION: Safety glasses w/side shields or face shield.</p>	
<p>OTHER EQUIPMENT: Flame retardant clothing as appropriate.</p>	
<p>MEASURES TO BE TAKEN DURING REPAIR &amp; MAINTENANCE OF CONTAMINATED EQUIPMENT THAT HAS BEEN IN CONTACT WITH MATERIAL: N/A</p>	

# SECTION IX SPECIAL PRECAUTIONS

<p>PRECAUTIONS TO BE TAKEN IN HANDLING &amp; STORAGE: See Section VII above. For additional information, consult "Guidelines for Handling Molten Aluminum", Aluminum Association, 818 Connecticut Ave, NW, Washington, DC 200</p>	
<p>OTHER PRECAUTIONS: Avoid contact with water; dross can react with water to ammonia, methane, acetylene and hydrogen.</p>	

-N/A-NO APPLICABLE INFORMATION FOUND -N/A-NOT APPLICABLE

The information disclosed is believed to be reliable. Since the use of the product described herein is unknown, the discloser assumes liability in regard to same. No warranty express or implied is made in connection with the information provided herein or the use of product in any form for any purpose. No license, actual or implied, is granted in regard to the use, process or practices disclosed.

cc L.P.K.  
Dave Beale.

## SECTION I: NAME AND PRODUCT

MANUFACTURER'S NAME

CONSOLIDATED ALUMINUM CORPORATION

CONTACT  
SECURITY OFFICE  
HANNIBAL, OH

ADDRESS (STREET, CITY, STATE AND ZIP CODE)

11960 WESTLINE INDUSTRIAL DR., ST. LOUIS, MO 63146

EMERGENCY TELEPHONE NO.

(614) 483-1341

TRADE NAME, COMMON NAME OR SPECIFICATION:

Aluminum Skimming or Dross.

MSDS-CODE NO.

**HAN**

DATE: March 23, 1989

CHEMICAL FAMILY OR PRODUCT TYPE

AL FAMILY OR PRODUCT TYPE  
A mixture of aluminum alloy, oxides and minor amounts of nitrides and carbides.

## SECTION II COMPOSITION

[illegible]

### SECTION III PHYSICAL AND CHEMICAL DATA

BOILING POINT:	N/A	MELTING POINT:	1220° F 648° C	SPECIFIC GRAVITY:	approx. 2.7
VAPOR PRESSURE:	N/A	% VOLATILE BY VOL:	N/A	VAPOR DENSITY:	60-125 lb./ft <sup>3</sup>
EVAP. POINT:	N/A	SOL. IN WATER:	N/A	SOL. IN ALCOHOL:	N/A
SOL. IN OTHER SOLVENT:			APPEARANCE AND ODOR:		
N/A			Silver/gray - slight ammonia odor when wet.		

#### SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	N/A	(METHOD USED)	FLAMMABLE LIMITS LEL
EXTINGUISHING MEDIA:	Use DRY powder extinguishing agents. Do not use water.		
SPECIAL FIRE FIGHTING PROCEDURES	Use NIOSH approved self-contained breathing units.		
EXPLOSION POTENTIAL:			

## SECTION V HEALTH, FIRST AID AND MEDICAL DATA

INITIAL ROUTES OF ENTRY	ACUTE & CHRONIC HEALTH EFFECTS & EFFECTS OF OVEREXPOSURE	FIRST AID & MEDICAL INFORMATION
<b>INITIAL ROUTES OF ENTRY</b> <b>APR 23 1990</b>	Aluminum dross is a low health risk by inhalation. Treat as a nuisance dust.	NIOSH approved dust and fume respirator is recommended.
<b>INGESTION</b> <b>MATERIALS MANAGEMENT</b>	Negligible Is not absorbed. Contact with hot dross will result in burns.	Seek medical attention for burns.
<b>EYE</b>	May cause irritations and abrasions.	Wear safety glasses or face shields.
<b>OTHER POTENTIAL HEALTH RISKS</b>		

## SECTION VI CORROSIVITY AND REACTIVITY DATA

STABILITY UNSTABLE ☐ STABLE ☒ POLYMERIZATION MAY OCCUR ☐ WILL NOT OCCUR ☒  
 INCOMPATIBILITY (MATERIALS TO AVOID): Material is reactive with water, producing ammonia, methane, acetylene and hydrogen.

DECOMPOSITION PRODUCTS: None expected.

CONDITIONS TO BE AVOIDED: Dross should not be dumped outdoors whenever wet conditions exist.

## SECTION VII STORAGE, HANDLING AND USE PROCEDURES

NORMAL STORAGE AND HANDLING: Store indoors whenever outside storage areas are wet. Do not ship or transport material when wet or hot.

NORMAL USE: Dross can be sold to recyclers in order to salvage useable metal and other materials.

STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS: Avoid the use of water, as water may react with dross to release ammonia, methane and acetylene.

WASTE DISPOSAL METHOD: In accordance with local, State and Federal waste management regulations.

## SECTION VIII PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE):

NIOSH approved for dusts and fumes

VENTILATION

LOCAL: In accordance with State and Federal regulations, if TLV is exceeded.  
 GENERAL: In accordance with State and Federal regulations, if TLV is exceeded.  
 OTHER:

PROTECTIVE GLOVES: Appropriate for job task.  
 EYE PROTECTION: Safety glasses with side shields or face shield.  
 OTHER EQUIPMENT: Flame retardant clothing as appropriate.

MEASURES TO BE TAKEN DURING REPAIR & MAINTENANCE OF CONTAMINATED EQUIPMENT THAT HAS BEEN IN CONTACT WITH THIS MATERIAL: N/A

## SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE:

OTHER PRECAUTIONS: Avoid contact with water, as water may react with dross to release ammonia, methane and acetylene. Ammonia P.E.L. is 50.PPM.

NAIF-NO APPLICABLE INFORMATION FOUND

N/A-NOT APPLICABLE

The information disclosed is believed to be reliable. Since the use of the product described herein is unknown, the discloser assumes liability in regard to same. No warranty express or implied is made in connection with the information provided herein or the use of the product in any form for any purpose. No license, actual or implied, is granted in regard to the use, process or practices disclosed.

## SECTION I NAME AND PRODUCT

MANUFACTURER'S NAME

CONSOLIDATED ALUMINUM CORPORATION

ADDRESS (STREET, CITY, STATE AND ZIP CODE)

11960 WESTLINE INDUSTRIAL DR., ST. LOUIS, MO 63146

TRADE NAME, COMMON NAME OR SPECIFICATION:

ALUMINUM DROSS

CHEMICAL FAMILY OR PRODUCT TYPE

MIXTURE

CONTACT

CUSTOMER SERVICE

CONSOLIDATED ALUMINUM

EMERGENCY TELEPHONE NO.

(314) 851-2394

MSDS-CODE NO.

8AG-5

DATE: November 25, 1985

## SECTION II COMPOSITION

(mg/H<sup>3</sup>)

CHEMICAL NAME	%	COMMON NAME	REG (Y/N)	CAS #	OSHA PERMISSIVE EXPOSURE LIMIT	(mg/H <sup>3</sup> ) ACGIH TLV	CAI OG LY
Aluminum and Aluminum Alloys	< 90	See Attachment Number 1					
Oxides	5-20	SAME	Y	1344-28-1	—	10	
Chlorides	Remainder	SAME	N	—	10 (Nuisance Dust)	10	
Carbides							
Nitrides							

## SECTION III PHYSICAL AND CHEMICAL DATA

BOILING POINT: N/A	MELTING POINT: 1200°F for Al	SPECIFIC GRAVITY: 2.7
VAPOR PRESSURE: N/A	% VOLATILE BY VOL: N/A	VAPOR DENSITY: N/A
EVAP. POINT: N/A	SOL. IN WATER: Negligible	SOL. IN ALCOHOL: N/A
SOL. IN OTHER SOLVENT: N/A	APPEARANCE AND ODOR: white to gray; chunks and dust contains Al droplets/lumps; slight ammonia odor when	

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A	(METHOD USED)	FLAMMABLE LIMITS LEL: N/A
EXTINGUISHING MEDIA: Dry powder or SAW. DO NOT USE WATER		
SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH-approved self-contained breathing units.		
EXPLOSION POTENTIAL: Powders/dusts <0.14 microns have LEL at 40-50 mg/l of air 50.04 oz/ft <sup>3</sup> . Ultra-fine dust cloud can be ignited with a 0.05 joule spark.		

## SECTION V HEALTH, FIRST AID AND MEDICAL DATA

PRIMARY ROUTE(S) OF ENTRY	ACUTE & CHRONIC HEALTH EFFECTS & EFFECTS OF OVEREXPOSURE	FIRST AID & MEDICAL INFORMATION
INHALATION	Low health risk via inhalation; treat as nuisance dust.	NIOSH-approved dust and fun respirator recommended.
INGESTION	Negligible.	
SKIN	Is not absorbed. Contact with hot dross will result in burns.	Seek medical attention for burns.
EYE	May cause irritation and abrasion.	Wear safety glasses or face shield. Flush eyes with
OTHER POTENTIAL HEALTH RISKS		water for 15 minutes. See medical attention. Provide adequate ventilati

## SECTION V HEALTH, FIRST AID AND MEDICAL DATA

PRIMARY ROUTES OF ENTRY:	ACUTE & CHRONIC HEALTH EFFECTS & EFFECTS OF OVEREXPOSURE	FIRST AID & MEDICAL INFORMATION
Inhalation:	Low health risk via inhalation; treat as a nuisance dust.	NIOSH-approved dust and fume respirator recommended.
Ingestion:	Negligible.	Seek medical attention.
Skin:	Is not absorbed; Contact with hot dross will result in burns.	Seek medical attention for burns.
Eyes:	May cause irritation and abrasion	Wear safety glasses or face shield. Flush eyes with water for 15 minutes. Seek medical attention. Provide adequate ventilation.

OTHER POTENTIAL HAZARDS: None Known

## SECTION VI CORROSIVITY AND REACTIVITY DATA

STABILITY: Unstable NO Stable YES

POLYMERIZATION: May Occur NO Will Not Occur YES

### INCOMPATIBILITIES (materials to avoid):

Non-metallic component may react with water to produce ammonia, methane, acetylene, and hydrogen. Metallic component can react with acids (e.g. hydrochloric and sulfuric acid) and alkaline materials (e.g. potassium hydroxide or sodium hydroxide) resulting in hydrogen evolution. The product may also react with halogens, oxidizing agents and certain halogenated hydrocarbons to produce hydrogen when mixed with acids and caustics. May liberate small quantities of various metallic oxides depending on alloy.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide, Carbon dioxide, oxides of nitrogen. Certain metal alloys may liberate oxides of heavy metals.

### CONDITIONS TO AVOID:

Do not expose finely divided dust to ignition sources. Do not allow hot dross to come into contact with water or wet materials. Use approved dust collection methods and avoid creation of dust clouds and/or accumulation of dust or powders during processing.

## SECTION VII STORAGE, HANDLING, AND USE PROCEDURES

### NORMAL STORAGE AND HANDLING:

Do not store outdoors when wet conditions arise. As a dust or powder, keep from all sources of ignition and moisture. Do not ship or transport when wet or hot.

### NORMAL USE:

See above. Wear approved personal protective equipment when handling in molten or hot state (flame retardant clothing, face and eye protection, gloves).

### STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS:

Wearing appropriate personal protective equipment, clean up spill of powder/dust with non-sparking scoops and brushes. Molten material should be damped with DRY sand or salt flux until solidified. DO NOT USE WATER!

### WASTE DISPOSAL METHOD:

Dispose of in accordance with local, state, and federal regulations. Dross can be sold to recyclers to recover useable metals and other materials.

# MATERIAL SAFETY DATA SHEET

## SECTION I NAME AND PRODUCT

### MANUFACTURER'S NAME:

Consolidated Aluminum Corporation  
11960 Westline Industrial Drive  
St. Louis, MO 63146

### CONTACT: Customer Service

Consolidated Aluminum  
Emergency Phones: (304) 652-1415  
Phone: (304) 652-1445

### TRADE NAME, COMMON NAME OR SPECIFICATION:

Black Dress

MSDS-Code No.: Not applicable

DATE PREPARED: 11-14-89

### CHEMICAL FAMILY OR PRODUCT TYPE:

Mixture

## SECTION II COMPOSITION

CHEMICAL NAME	%	COMMON NAME	REQ y/n	CASE	OSHA PERMISSIVE EXPOSURE LIMIT mg/m3	ACQIN ILV mg/m3	CARCINOGEN y/n
Aluminum and Aluminum alloys	<20	Aluminum	y	7429-90-5	15 total dust 5 resp. dust	10	no
Oxides	5-20	Oxides	y	1344-28-1	---	10	no
Chlorides		Chlorides					
Carbides ) Nitrides	rest	Carbides Nitrides	n		10 (nuisance dust)	10	no

## SECTION III PHYSICAL AND CHEMICAL DATA

BOILING POINT: N/A

MELTING POINT: 1200F for Al

SPECIFIC GRAVITY: N/A

VAPOR PRESSURE: N/A

% VOLATILE BY VOL: N/A

VAPOR DENSITY: N/A

EVAP. POINT: N/A

SOL. IN WATER: negligible

SOL. IN ALCOHOL: N/A

SOL. IN OTHER SOLVENT: N/A

APPEARANCE AND ODOR:

Black to grey; chunks to dust; contains Al droplets/lumps; slight ammonia odor when wet.

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A (METHOD USED) FLAMMABLE LIMITS: LEL N/A UEL N/A

EXTINGUISHING MEDIA:

Dry powder or sand. DO NOT USE WATER!

SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH-approved self-contained breathing units.

EXPLOSION POTENTIAL:

Powders/dusts <0.14 microns have LEL at 40-50 mg/l of air >0.04 oz/ft3.  
Ultra fine dust cloud can be ignited with a 0.05 joule spark.

VIII. Type of Regulated Waste Activity (Waste description, generate boxes. Refer to instructions.)

### B. Used Oil Fuel Activities

- IX. Description of Regulated Wastes (Use additional sheets if necessary)

1. Ignitable (D001) ☒ 2. Corrosive (D002) ☐ 3. Reactive (D003) ☐ 4. EP Toxic (D000) ☐ (List specific EPA hazardous waste number(s) for the EP Toxic contaminant(s))

<b>1</b>			
<b>7</b>			

<b>2</b>			
<b>8</b>			

<b>3</b>			
<b>9</b>			

<b>4</b>			
<b>10</b>			

<b>5</b>			
<b>11</b>			

<b>6</b>			
<b>12</b>			

1	2	3	4	5	6

***I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.***

Date Signed \_\_\_\_\_

ADMINISTRATIVE MGR ~~PA~~ 11/1/90

## MAR - 7 1991

**Note: Mail completed form to the appropriate EPA Regional or State Office. (See Section III of the booklet for addresses.)**

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved: OMB No. 2050-0029, Expires 10-31-91  
GSA No. 221A-224-27

Please refer to the <i>Instructions for Filing Notification</i> before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).	<h2 style="margin: 0;">Notification of</h2> <div style="background-color: black; width: 200px; height: 40px; margin: 5px auto;"></div> <h2 style="margin: 0;">te</h2>	Date Received (For Official Use Only)  <div style="font-size: 1.5em; font-weight: bold;">DEC 12 1990</div>
I. Installation's EPA ID Number (Mark )		
<input checked="" type="checkbox"/> A. First Notification	<input type="checkbox"/> B. Subsequent Notification (complete item C)	C. Installation's EPA ID Number <div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           WV 0988774626         </div>
II. Name of Installation (Include company and specific site name)		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           BENS RUN RECYCLING         </div>		
III. Location of Installation (Physical address not P.O. Box or Route Number)		
Street <div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           STATE ROUTE 2         </div>		
Street (continued)		
City or Town		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           BENS RUN         </div>		
State ZIP Code		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           WV 26135-         </div>		
County Code County Name		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           15 STYLER         </div>		
IV. Installation Mailing Address (See Instructions)		
Street or P.O. Box		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           PO BOX 60         </div>		
City or Town		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           BENS RUN         </div>		
State ZIP Code		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           WV 26135-         </div>		
V. Installation Contact (Person to be contacted regarding waste activities at site)		
Name (last) (first)		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           BEALE DAVID         </div>		
Job Title Phone Number (area code and number)		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           ADMIN MANAGER 304-652-1415         </div>		
VI. Installation Contact Address (See Instructions)		
A. Contact Address Location B. Street or P.O. Box		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;"> <input type="checkbox"/> Location <input checked="" type="checkbox"/> Mailing       </div>		
City or Town		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           STATE ROUTE 2         </div>		
State ZIP Code		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           WV 26135-         </div>		
VII. Ownership (See Instructions)		
A. Name of Installation's Legal Owner		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           BENS RUN RECYCLING         </div>		
Street, P.O. Box, or Route Number		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           SAME AS ABOVE         </div>		
City or Town		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           STATE ROUTE 2         </div>		
State ZIP Code		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           WV 26135-         </div>		
Phone Number (area code and number)		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           304-652-1415         </div>		
B. Land Type C. Owner Type D. Change of Owner Indicator (Date Changed)		
<div style="border: 1px solid black; padding: 2px; font-family: monospace; font-size: 0.8em;">           P P Yes No         </div>		

E O EST RG A  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
DISCHARGE MONITORING REPORT

FACILITY NAME Bens Run Recycling Facility  
LOCATION OF FACILITY Bens Run, Tyler County, WV  
PERMIT NUMBER WV0078344 OUTLET NO. 001  
WASTELOAD FOR MONTH OF April 19 91

COMMERCIAL LABORATORY NAME NUS CORPORATION  
COMMERCIAL LABORATORY ADDRESS 5350 Campbells Run Road  
Pittsburgh, PA 15205  
INDIVIDUAL PERFORMING ANALYSES J. Simanic

Parameter		Quantity					Other Units					Measurement Frequency	Sample Type
		Minimum	Avg. Monthly	Max. Daily	Units	N.E.	Minimum	Avg. Monthly	Max. Daily	Units	N.E.		
Flow 50050	Reported								0.0058			1 Month	Estimate
	Permit Limitation	N/A	N/A	N/A			N/A	N/A	Monitor mgd			1/month	Estimate
Total Suspended Solids 00530	Reported								<10			1/month	Grab
	Permit Limitation	N/A	N/A	N/A			N/A	N/A	Monitor mg/l			1/month	Grab
Oil & Grease 00556	Reported								4			1/month	Grab
	Permit Limitation	N/A	N/A	N/A			N/A	N/A	Monitor mg/l			1/month	Grab
pH 00400	Reported						7.5		7.5			1/month	Grab
	Permit Limitation	N/A	N/A	N/A			6.0	N/A	9.0	s.u.		1/month	Grab
	Reported												
	Permit Limitation												
	Reported												
	Permit Limitation												
	Reported												
	Permit Limitation												

Name of Principal Exec. Officer  <div style="border: 1px solid black; padding: 2px; text-align: center;">David R. Beale</div> Title of Officer  Administrative Manager	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment, for knowing violations.	Date Completed Sample Date: 4/8/91 Report Date: 4/22/91 Signature of Principal Exec. Officer or Authorized Agent 
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provided by facility  
H-30-91

Attachment No. 6



## BENS RUN RECYCLING

*a division of*

**CONSOLIDATED  
ALUMINUM**

Phone 304-652-1415  
Fax 304-652-1265

April 23, 1991


Mr. John Perkins  
Department of Commerce, Labor  
and Environmental Resources  
Division of Natural Resources  
1201 Greenbrier Street  
Charleston, West Virginia 25311

Dear Mr. Perkins:

Attached is the monitoring report for the outlet at Bens Run for the month of April, 1991. If you have any questions please call.

Sincerely,

BENS RUN RECYCLING



David R. Beale  
Administrative Manager

DRB/lw

Attachment